

Attorney Docket 55434US002
U.S.S.N. 09/591,584

REMARKS/ARGUMENTS

In the Office Action dated October 27, 2003, claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39 were rejected under § 103(a) as being unpatentable over U.S. Patent No. 5,118,540 to Hutchison in view of U.S. Patent No. 4,157,417 to Murphy; claim 10 was rejected under § 103(a) as being unpatentable over the '540 patent and the '417 patent in view of U.S. Patent No. 6,033,785 to Tanaka et al.; claim 6 was rejected under § 103 as being unpatentable over the '540 patent and the '417 patent in view of U.S. Patent No. 5,677,050 to Bilkadi et al; and claims 14, 15, 22 and 35 were rejected under § 103(a) as being unpatentable over the '540 patent and the '417 patent in view of U.S. Patent No. 6,013,722 to Yang et al. The Office Action indicates that claims 12, 16, 23-30, 34, 36, 37 and 40 recite allowable subject matter. With regard to claims 16, 23, 36 and 37, the Office Action indicates that those claims would be allowable if rewritten to overcome a § 112 rejection. However, a § 112 rejection is not set out in the October 27th Office Action. Hence, the applicant has presumed that this statement was made in error and, instead, the Office Action should have indicated that claims 16, 23, 36 and 37 recite allowable subject matter.

Claim 1 recites "a laminate attached to window glass." Independent claim 9 recites a glazing element comprising a laminate and window glass.

With regard to the rejection of claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39 based on the '540 patent and the '417 patent, the Office Action indicates on pages 2 and 3:

Hutchison teaches the reflective film suitable for solar energy applications (abstract). Hutchison does not specifically disclose the reflective film attached to window glass. Murphy, however, teaches the reflective film having been attached to window glass to reduce heat, glare or solar radiation (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the reflective film in combination with window glass motivated by the desire to reduce heat, glare or solar radiation.

This rejection is respectfully traversed for the following reasons.

Hutchison teaches that his reflective film 100 is used "in reflector element 210," see column 7, lines 11 and 12. Hutchison further teaches that the "reflector element 210 may comprise support structure 212, which may be either solid or framework, holding a surface 214 configured in a trough like shape," see column 7, lines 20-23. The '540 patent also teaches "the

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flexible reflective film may be incorporated into other types of lighting reflectors and solar energy applications, e.g., parabolic solar dish and heliostat applications," see column 7, lines 41-44. However, nowhere does Hutchison disclose, teach or suggest using his film in combination with window glass. Murphy discloses "transparent-reflective metallized solar control compositions and films for application to window glass to reduce heat, glare, etc., of solar radiation" (see the Abstract of the '417 patent.) Murphy further states in column 5, lines 25-27, "[t]here is a marked reduction in transmission of ultraviolet rays, infrared light, and reduction in glare while retaining good transparency to visible light."

It is submitted that there is no motivation or suggestion in either the '540 patent or the '417 patent to combine the teachings of Hutchison and Murphy in the manner espoused in the Office Action. Hutchison teaches providing a reflective film for use in a solar energy concentrator 200, see column 7, lines 9 and 10, and "other types of lighting reflectors ***," see column 7, lines 41-45. Hutchison teaches that "when the reflector [element 210 of the concentrator 200] is oriented toward the sun, solar radiation impinging on any part of the surface of the flexible film 100 is reflected to converge at the line of focus of that parabolic surface," see column 7, lines 24-27. Hutchison further teaches that "to be efficient[,] a reflective film must be highly specularly reflective to visible, ultraviolet, and/or near infra-red light between about 300-2,500 nanometers," see column 1, lines 19-22 of the '540 patent. Murphy, in contrast, discloses a film having "a marked reduction in transmission of ultraviolet rays, infrared light and reduction in glare while retaining good transparency to visible light," see column 5, lines 25-28. Hence, the Hutchison film¹ functions to reflect visible light while the Murphy film functions to transmit visible light. Because the two films have such diametrically opposed functions, it is submitted that one skilled in the art would not have been motivated to combine their teachings as proposed in the Office Action. Rather, the only teaching for providing a laminate in combination with window glass, as recited in claims 1 and 9, comes from the applicant's own disclosure, which cannot be used against him.

¹ It is noted that the '540 patent teaches in column 2, lines 15-18, "a thin layer of silver *** is characterized by the presence of a spectral 'window' through which ultraviolet light in the 300-400 nanometer region readily passes." It is also noted that no mention is made in the '540 patent that a thin layer of silver is characterized by the presence of a spectral window through which visible light passes.

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As noted above, Tanaka et al. has been applied in combination with Hutchison and Murphy with regard to claim 10, and Yang et al. has been applied in combination with Hutchison and Murphy with regard to claims 14, 15, 22 and 35. It is submitted that neither Tanaka et al. nor Yang et al. provide any motivation or suggestion for combining the teachings of Hutchison and Murphy in the manner espoused in the Office Action.

Accordingly, for the reasons discussed above, it is submitted that Hutchison, Murphy, Tanaka et al. and Yang et al., whether taken singly or in combination, do not disclose, teach or suggest the subject matter set out in claims 1-5, 7-11, 13-15, 17-22, 31-33, 35, 38, 39.

The Bilkadi et al. patent has been applied in combination with the Hutchison and Murphy patents with regard to claim 6. Bilkadi et al. teach a hard coating comprising a cured ceramer. While the Bilkadi et al. patent does disclose a retroreflective sheeting including a cured ceramer layer, nowhere does it suggest forming a laminate comprising at least two flexible nonadhesive polymeric material laminac and wherein the laminate has a thickness of at least about 5 mils, exhibits a light transmittance and is attached to window glass. Nor does it provide any motivation or suggestion for combining the teachings of Hutchison and Murphy in the manner espoused in the Office Action. Accordingly, Hutchison, Murphy and Bilkadi et al., whether taken singly or in combination, do not disclose teach or suggest the subject matter set out in claim 6.

I is submitted that this paper does not raise new issues. Hence, entry of this paper is respectfully requested.

It is also submitted that there are other limitations recited in the claims, in addition to those discussed above, which further distinguish the claimed invention patentably from the cited art and the other art of record. These additional distinguishing limitations will not be discussed because there is no need to do so at this time. Accordingly, it is submitted that all prior art rejections should be withdrawn and the case allowed.

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In view of the above remarks, applicant submits that claims 1-40 define patentably over the prior art. Early notification of allowable subject matter is respectfully requested.

Respectfully submitted,
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